Mabuchi small electric motors: powerful, reliable, cost effective.

As the world's largest maker of small electric motors – some 3million per day – the chances of finding one tailored to your specific needs among Mabuchi's range of standard motors are excellent. A variety of standard motors with average performance characteristics at indicated voltage are shown here. They are also available with a variety of other armature windings for use at specific voltages to achieve desired performances. Contact Mabuchi Motor for additional information on motors suited to your performance requirements. Power Curves and 3-View Drawings with production tolerances are also available on request. *Please state voltage & end use.*

Typical Motor Performances

MABUCHI MOTOR

MODEL	SIZE(m/m)		WEIGHT	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY				STALL		
	HOUSING DIAMETER	HOUSING LENGTH		OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE		TORQUE		CURRENT
			g			rpm	A	rpm	A	g·cm	mN·m	g·cm	mN·m	A
RE-140RA-2270	φ21.0	25.0	19	1.5~3.0	1.5V	8100	0.205	6172	0.656	6.67	0.653	28	2.75	2.1
RE-260RA-2670	φ23.8	26.9	28	1.5~3.0	3.0V	12250	0.20	10161	0.973	15.26	1.497	89.5	8.77	4.73
RE-280RA-2865	φ23.8	30.5	42	1.5~3.0	3.0V	9200	0.155	7786	0.854	19.98	1.959	130	12.75	4.7
FA-130RA-2270	15.1×φ20.1	25.0	17	1.5~3.0	1.5V	9100	0.200	6992	0.663	6.02	0.591	26	2.55	2.2
FA-260RA-2670	18.3×φ24.2	26.9	28	1.5~3.0	3.0V	12100	0.210	10007	1.004	15.91	1.560	92	9.02	4.8
SU-020SA-09170	9.5×18.0	18.9	9.5	1.5~3.0	3.0V	9300	0.065	6650	0.160	2.4	0.235	8.5	0.833	0.415
RC-260RA-18130	φ23.8	26.9	28	4.5~6.0	6.0V	13600	0.158	10915	0.642	16.98	1.665	86	8.43	2.61
RC-280RA-2485	φ23.8	30.5	42	4.5~7.2	4.5V	10300	0.150	8600	0.770	22.8	2.234	140.0	13.72	3.95
FC-130RA-14150	15.1×φ20.1	25.0	17	4.5~6.0	4.5V	13200	0.14	9890	0.418	7.52	0.737	30	2.94	1.25
FC-260SA-10300	18.3×φ24.2	26.9	28	6.0~16.0	12.0V	8600	0.090	6440	0.27	20	1.96	80	7.84	0.800
FC-280PT-20150	18.3×φ24.2	30.5	35	6.0~15.0	12.0V	12500	0.120	10592	0.666	41.20	4.040	270	26.47	3.7
FC-280SM-12400	18.3×φ24.2	30.5	35	6.0~15.0	12.0V	12400	0.090	10619	0.537	37.34	3.661	260	25.49	3.2
FT-010SA-09190	10.0×φ15.0	19.0	8.5	6.0~12.0	9.0V	27000	0.125	19619	0.332	5.85	0.574	21.4	2.10	0.883
SH-030SA-09170	9.5×18.0	18.9	11	4.5~9.0	6.0V	15000	0.090	11082	0.255	5.35	0.525	20.5	2.01	0.72
RF-N30CA-11150	φ12.1	19.5	8	2.0~5.0	5V+1Ω	19900	0.075	15000	0.254	3.75	0.368	15	1.47	0.79
RF-N60CA-1955	φ12.1	30.0	13	1.0~3.0	2.4V	12650	0.125	10140	0.505	6.35	0.623	32	3.14	2.04
RF-020TH-10210	φ17.1	18.0	15.5	2.0~5.0	4.5V	12600	0.059	9584	0.189	3.93	0.385	16.4	1.61	0.6
RF-130CH-12250	φ17.1	22.8	18	2.0~7.5	3.5V	4690	0.028	3727	0.106	4.95	0.485	24.1	2.36	0.412
RF-270RH-12370	φ24.4	30.8	51	6.0~15.0	12.0V	6150	0.028	5130	0.14	19.2	1.88	115	11.27	0.7
RF-300CA-11400	φ24.4	12.3	22	0.7~5.0	2.0V	2400	0.02	1818	0.062	3.03	0.297	12.5	1.23	0.195
RF-300PA-11400	φ24.4	12.3	20.3	1.0~3.0	3.0V	2980	0.015	2420	0.065	4.36	0.427	23.2	2.274	0.28
RF-310PA-12330	φ24.4	10.3	18	1.0~2.0	2.0V	3650	0.038	2703	0.109	3.11	0.305	12	1.18	0.31
RF-310TA-11400	φ24.4	18.4	29	1.0~6.0	2.5V	2800	0.017	2191	0.061	3.26	0.32	15	1.47	0.22
RF-320CH-12400	φ24.4	18.4	28	1.0~4.5	2.5V	2200	0.018	1742	0.068	4.79	0.47	23	2.25	0.26
RF330TK-07800	φ24.4	18.4	32	1.0~12.0	3.0V	1720	0.006	1280	0.02	1.6	0.16	6.2	0.608	0.05
RF-370CA-15370	φ24.4	30.8	51	3.0~12.0	12.0V	5550	0.026	4800	0.17	25.3	2.48	187	18.3	1.06
RF-370CN-11670	φ24.4	30.8	51	6.0~14.0	12.0V	3150	0.013	2640	0.067	17.17	1.68	106	10.39	0.348
RF-410CA-12250	φ26.4	10.0	20	1.0~2.0	1.9V	3740	0.029	2885	0.098	2.84	0.278	12.4	1.22	0.33
RF-500TB-14415	φ32.0	19.5	45	1.5~6.0	6.0V	3700	0.028	3062	0.134	14.48	1.42	84	8.24	0.645
RD-180SA-2085	φ21.3	29.0	31	1.2~4.5	2.4V	5300	0.045	4562	0.278	9.89	0.97	71	6.96	1.72
FF-M20VA-8Z130	8.0×φ10.0	15.0	4	2.0~3.0	3.0V	15200	0.045	11819	0.157	1.69	0.166	7.6	0.745	0.55
FF-N20PN-13115	10.0×φ12.0	15.0	5	2.0~3.0	2.4V	15800	0.096	12258	0.332	2.85	0.279	12.7	1.25	1.15
FF-N30VA-09210	10.0×φ12.0	20.0	7.5	2.0~5.0	2.5V	5200	0.019	4039	0.066	1.83	0.179	8.2	0.804	0.23
FF-030PN-09210	12.0×φ15.5	18.6	11	1.0~6.0	4.7V	9800	0.045	7475	0.145	4.03	0.395	17	1.67	0.465
FF-030PK-08250	12.0×φ15.5	18.6	11	1.0~7.0	4.5V	7700	0.032	5860	0.102	3.42	0.335	14.3	1.40	0.325
FF-050SK-11170	12.0×φ15.5	26.9	17.5	1.0~8.0	7.0V	10250	0.046	8287	0.194	8.81	0.864	46	4.51	0.82
FF-110PH-08280	13.0×φ16.0	11.4	7.5	1.0~3.0	3.0V	8010	0.031	5869	0.085	1.58	0.155	5.9	0.58	0.233
FF-130SH-11340	15.4×φ20.4	25.1	24	2.0~9.0	9.0V	7300	0.035	5950	0.154	12.30	1.205	66.5	6.517	0.68
FF-160PA-2664	15.5×φ18.0	32.1	28	1.0~3.0	2.4V	7450	0.12	6285	0.647	14.7	1.44	94	9.22	3.49
FF-180SH-2657	15.4×φ20.4	32.1	32	1.0~3.0	2.4V	7650	0.13	6456	0.703	16.7	1.64	107	10.5	3.8
FF-190PA-2653	15.5×φ18.0	36.5	31.7	1.0~3.0	2.4V	7000	0.13	5869	0.675	16.8	1.65	104	10.2	3.5
FF-270PA-4031	17.9×φ21.4	30.0	33	0.5~1.5	1.2V	7000	0.34	5800	1.65	19.7	1.93	115	11.3	8.00
RK-270RH-13250	φ24.4	30.8	51	4.0~24.0	24.0V	19200	0.075	16240	0.411	36.3	3.56	235	23.0	2.25
RK-370CA-18220	φ24.4	30.8	51	4.5~18.0	12.0V	9350	0.06	8120	0.395	34.3	3.36	260	25.5	2.60
RK-384CA-16170	φ24.4	36.0	56.2	24.0~30.0	30.0V	21000	0.145	16771	0.575	58.40	5.726	290	28.43	2.28
RK-P36CA-22210	φ60.0	25.0	260	9.0~14.0	14.0V	2316	0.093	1925	0.458	199.34	19.543	1182	115.88	2.260
FK-130RH-09490	15.4×φ20.4	25.1	24	6.0~18.0	12.0V	9000	0.034	6988	0.118	8.94	0.877	40	3.92	0.410
FK-130RD-09490	15.4×φ20.4	25.0	24	6.0~18.0	12.0V	8800	0.030	6870	0.107	8.34	0.817	38	3.73	0.380
FK-180SH-16150	15.4×φ20.4	32.1	32	4.5~12.0	12.0V	13850	0.080	11850	0.48	27	2.65	185	18.1	2.82
FK-260SA-09450	18.3×φ24.2	26.9	29	12.0~24.0	12.0V	5750	0.027	19114	0.106	14.77	1.448	73	7.16	0.42
FK-280PA-18165	18.3×φ24.2	30.5	36	8.0~16.0	12.0V	10500	0.090	9000	0.54	42	4.12	295	28.9	3.25